

## CLAIMS

We Claim:

- 1        1. A diagnostic tool comprising:
  - 2            a fax test module, the fax test module including:
    - 3                a telephone connector,
    - 4                a fax modem module, and
    - 5                a phone line emulator;
    - 6                a display; and,
    - 7                a processor that causes menus to be shown on the display, the menus
    - 8                allowing a user to select tests to be performed on a device under test, the tests
    - 9                including:
      - 10                a send fax test, and
      - 11                a receive fax test;
      - 12                wherein the menus list devices that can be tested by the diagnostic tool;
      - 13                and,
      - 14                wherein the menus list at least one device that does not have fax
      - 15                capability and at least one device that does have fax capability.
- 1        2. A diagnostic tool as in claim 1 wherein
  - 2                the menus additionally include a select test menu and a select product
  - 3                menu.

- 1        3. A diagnostic tool comprising:
  - 2            an expansion port;
  - 3            a fax test module connected to the expansion port, the fax test module
  - 4        including:
    - 5            a telephone connector,
    - 6            a fax modem module, and
    - 7            a phone line emulator;
    - 8            a display; and,
    - 9            a processor that causes menus to be shown on the display, the menus
    - 10        allowing a user to select tests to be performed on a device under test, the tests
    - 11        including:
      - 12            a send fax test, and
      - 13            a receive fax test.
  - 1        4. A diagnostic tool as in claim 3 wherein  
2            the menus include a select product menu and a select test menu.
  - 1        5. A diagnostic tool as in claim 3 wherein  
2            the menus include a select category menu, a select product menu and a  
3            select test menu.
  - 1        6. A diagnostic tool as in claim 3 wherein

2 wherein the menus list devices that can be tested by the diagnostic tool;

3 and,

4 wherein the menus list at least one device that does not have fax

5 capability and at least one device that does have fax capability.

1 7. A handheld diagnostic tool comprising:

2 power circuitry based on power supplied by battery;

3 a fax test module connected to the expansion port, the fax test module

4 including:

5 a telephone connector,

6 a fax modem module, and

7 a phone line emulator;

8 a display; and,

9 a processor that causes menus to be shown on the display, the menus

10 allowing a user to select tests to be performed on a device under test, the tests

11 including:

12 a send fax test, and

13 a receive fax test.

1 8. A handheld diagnostic tool as in claim 7 wherein

2 the menus include a select product menu and a select test menu.

1           9. A handheld diagnostic tool as in claim 7 wherein  
2           the menus include a select category menu, a select product menu and a  
3   select test menu.

1           10. A diagnostic tool as in claim 7 wherein  
2           wherein the menus list devices that can be tested by the diagnostic tool;  
3   and,  
4           wherein the menus list at least one device that does not have fax  
5   capability and at least one device that does have fax capability.

1           11. A method for testing a device under test (DUT) wherein the DUT  
2   includes fax capability, the method comprising:  
3           connecting a cable from the DUT to a diagnostic tool; and,  
4           sending a fax from the diagnostic tool to the DUT, including the  
5   following:  
6               emulating, by the diagnostic device over the cable, a phone line to  
7   the DUT,  
8               performing fax transmission of data from the diagnostic tool to  
9   the DUT, and  
10              terminating the fax transmission.

1           12. A method as in claim 11 wherein emulating the phone line includes  
2       the following:  
3           producing an alert signal.

1           13. A method as in claim 11 additionally comprising the following  
2       performed before sending the fax:  
3           selecting by a user the device under test from a plurality of devices  
4       listed on a menu by the diagnostic tool, the plurality of devices including at  
5       least one device that does not have fax capability and at least one device that  
6       does have fax capability.

1           14. A method for testing a device under test (DUT) wherein the DUT  
2       includes fax capability, the method comprising:  
3           connecting a cable from the DUT to a diagnostic tool; and,  
4           sending a fax from the DUT to the diagnostic tool, including the  
5       following:  
6           emulating, by the diagnostic device over the cable, a phone line to  
7       the DUT,  
8           performing fax transmission of data from the DUT to the  
9       diagnostic tool, and  
10          terminating the fax transmission.

1           15. A method as in claim 14 wherein emulating the phone line includes  
2       the following:

3           producing a dial tone; and,  
4           receiving a dialed number.

1           16. A method as in claim 14 additionally comprising the following  
2       performed before sending the fax:

3           selecting by a user the device under test from a plurality of devices  
4       listed on a menu by the diagnostic tool, the plurality of devices including at  
5       least one device that does not have fax capability and at least one device that  
6       does have fax capability.

1           17. A method as in claim 14 additionally comprising:

2           sending a fax from the diagnostic tool to the DUT, including the  
3       following:

4           emulating again, by the diagnostic device, a phone line to the  
5       DUT,

6           performing fax transmission of data from the diagnostic tool to  
7       the DUT, and

8           terminating the fax transmission.

1           18. A method as in claim 17 wherein emulating again the phone line  
2     includes the following:  
3         producing an alert signal.

1           19. A method as in claim 17 additionally comprising the following  
2     performed before sending the fax:  
3         selecting by a user the device under test from a plurality of devices  
4     listed on a menu by the diagnostic tool, the plurality of devices including at  
5     least one device that does not have fax capability and at least one device that  
6     does have fax capability.

1           20. A diagnostic tool comprising:  
2         a module means for sending and receiving fax, the module means  
3     including:  
4         connector means for providing a telephone connection,  
5         fax means for producing and receiving fax transmissions, and  
6         emulator means for emulating a phone line;  
7         display means for displaying menus to a user; and,  
8         processing means for controlling display of the menus by the display  
9     means, the menus allowing the user to select tests to be performed on a device  
10    under test, the tests including:  
11         a send fax test, and

12           a receive fax test;

13           wherein the menus list devices that can be tested by the diagnostic tool;

14   and,

15           wherein the menus list at least one device that does not have fax

16   capability and at least one device that does have fax capability.